

A Chest Compression Device with Electro-Stimulation

100 This application is a continuation of U.S. Application  
09/829,859, filed April 9, 2001, <sup>now abandoned</sup> which is a continuation of U.S.  
Application 09/100,840, filed June 19, 1998, now U.S. Patent  
5 6,213,960.

Field of the Inventions

This invention relates to the resuscitation of cardiac  
arrest victims.

Background of the Inventions

10 Cardiopulmonary resuscitation (CPR) is a well known and  
valuable method of first aid. CPR is used to resuscitate people  
who have suffered from cardiac arrest after heart attack,  
electric shock, chest injury and many other causes. During  
cardiac arrest, the heart stops pumping blood, and a person  
15 suffering cardiac arrest will soon suffer brain damage from lack  
of blood supply to the brain. Thus, CPR requires repetitive  
chest compression to squeeze the heart and the thoracic cavity  
to pump blood through the body. Very often, the victim is not  
breathing, and mouth to mouth artificial respiration or a bag  
20 valve mask is used to supply air to the lungs while the chest  
compression pumps blood through the body. The methods of  
providing oxygenated airflow to the lungs are referred to as  
ventilation.

It has been widely noted that CPR and chest compression can  
25 save cardiac arrest victims, especially when applied immediately  
after cardiac arrest. Chest compression requires that the  
person providing chest compression repetitively push down on the